Having described the invention, the following is claimed:

1. An antenna for use in inductive coupling two devices, the antenna comprising:

a first coil having a first inductance value;

a second coil having a second inductance value; and

a capacitor having a capacitance value,

the first and second coils and the capacitor forming a tank circuit having a predetermined resonant frequency,

the capacitance value of the capacitor varying inversely to an equivalent inductance value of the tank circuit for providing the predetermined resonant frequency, the first and second coils being connected in parallel with one another so that the equivalent inductance value of the tank circuit is less than each of the first and second inductance values and the capacitance value of the capacitor is maintained above a predetermined threshold value for providing stability to the tank circuit.

2. The antenna of claim 1 wherein the first and second coils are spaced apart from one another so as to prevent mutual inductance between the first and second coils.

3. The antenna of claim 2 wherein the first and second coils have predetermined lengths, the first and second coils being spaced apart from one another by a distance that is greater than each of the predetermined lengths.

4. The antenna of claim 1 wherein the first and second coils are wound in opposite directions relative to one another.

5. The antenna of claim 1 wherein the first and second coils are elongated and have curved profiles, the antenna being mountable to a rim having a curved outer surface, the curved profiles of the first and second coils enabling the first and second coils to be mounted in a direction parallel to the curved outer surface of the rim.

6. The antenna of claim 1 wherein the predetermined resonant frequency of the tank circuit is approximately 13 mega-Hertz and the predetermined threshold value for the capacitor is approximately 20 pico-Farad.

7. A tire parameter sensing system for sensing a parameter of a tire of a vehicle, the tire parameter sensing system comprising:

a vehicle-based unit; and

a tire-based unit that is associated with the tire of the vehicle, the tire-based unit being operative for sensing the parameter of the tire and

for providing an indication of the sensed parameter to the vehicle-based unit,

the vehicle-based unit and the tire-based unit including associated structures for inductively coupling the tire-based unit to the vehicle-based unit so as to provide electrical energy to the tire-based unit,

the associated structures including an antenna having first and second coils and a capacitor, the first coil having a first inductance value, the second coil having a second inductance value, and the capacitor having a capacitance value, the first and second coils and the capacitor forming a tank circuit having a predetermined resonant frequency, the capacitance value of the capacitor varying inversely to an equivalent inductance value of the tank circuit for providing the predetermined resonant frequency, the first and second coils being connected in parallel with one another so that the equivalent inductance value of the tank circuit is less than each of the first and second inductance values and the capacitance value of the capacitor is maintained above a predetermined threshold value for providing stability to the tank circuit.

8. The tire parameter sensing system of claim 7 wherein the first and second coils are spaced apart from one another so as to prevent mutual inductance between the first and second coils.

9. The tire parameter sensing system of claim 8 wherein the first and second coils have predetermined lengths, the first and second coils being spaced apart from one another by a distance that is greater than each of the predetermined lengths.

10. The tire parameter sensing system of claim 8 wherein the antenna forms a portion of the tire-based unit, a parameter sensing portion of the tire-based unit being interposed between the first and second coils and spacing the first and second coils apart from one another.

11. The tire parameter sensing system of claim 7 wherein the first and second coils are wound in opposite directions relative to one another.

12. The tire parameter sensing system of claim 7 wherein the first and second coils are elongated and have curved profiles, the antenna forming a portion of the tire-based unit and being mountable to a rim having a curved outer surface, the curved profiles of the first and second coils enabling the first and second coils to be mounted in a direction parallel to the curved outer surface of the rim.

13. The tire parameter sensing system of claim 12 wherein the tire-based unit further includes a transmitting antenna for transmitting parameter signals to the vehicle-based unit, the transmitting antenna extending in a direction perpendicular to a tangent of the curved outer

surface of the rim when the first and second coils are mounted to the rim in the direction parallel to the curved outer surface.

14. The tire parameter sensing system of claim 7 wherein the predetermined resonant frequency of the tank circuit is approximately 13 mega-Hertz and wherein the predetermined threshold value for the capacitor is approximately 20 pico-Farad, the predetermined threshold value of the capacitor providing stability to the antenna during varying environmental conditions experienced by the tire parameter sensing system.